Contents

PART 1 FEBRUARY 1994

REVIEWS

LUCOCQ J. Quantitation of gold labelling and antigens in immunolabelled ultrathin sections *page* 1

COLETTA P L, SHIMELD S M, SHARPE P T. The molecular anatomy of Hox gene expression 15

PAPERS

ORPEN B G, STEINER M. Neural connections of the suprachiasmatic nucleus and medial hypothalamus of the Syrian hamster (*Mesocricetus auratus*) 23

MESTRES P, RASCHER K. The ventricular system of the pigeon brain: a scanning electron microscope study 35

YUCEL F, WARREN M A, GUMUSBURUN E. The effects of undernutrition on connectivity in the cerebellar cortex of adult rats 59

CHIEN C-H, WANG S-C, SHEN C-L. Innervation of the ligament of the femoral head in the Formosan rock monkey: a retrograde HRP tracing and ultrastructural study 65

SCOTT J E, BOSWORTH T R, CRIBB A M, TAYLOR J R. The chemical morphology of age-related changes in human intervertebral disc glycosaminoglycans from cervical, thoracic and lumbar nucleus pulposus and annulus fibrosus 73

DAĞDEVIREN A, ALP H, ÖRS Ü. New applications for the zinc iodide–osmium tetroxide technique 83

ATASEVER A, PALAOĞLU S, ERBENGI A, ÇELIK H H. Labelling of neurons in the rat superior cervical ganglion after injection of wheat-germ agglutinin–horseradish peroxidase into the contralateral ganglion: evidence of transneuronal labelling 93

BRECKON J J W, HEMBRY R M, REYNOLDS J J, MEIKLE M C. Regional and temporal changes in the synthesis of matrix metalloproteinases and TIMP-1 during development of the rabbit mandibular condyle 99

ANDREWS T J, LI D, HALLIWELL J, COWEN T. The effect of age on dendrites in the rat superior cervical ganglion 111

FRAHER J P, O'LEARY D. Morphological specialisations of rat cranial nerve transitional zones 119

NGO T D, DAVIES D C, EGEDI G Y, TÖMBÖL T. A Phaseolus lectin anterograde tracing study of the tectorotundal projections in the domestic chick 129

FERNANDEZ J G, SANCHEZ A J, MELCON C, CHAMORRO C A, GARCIA C, PAZ P. Development of the chick thymus microenvironment: a study by lectin histochemistry 137

SHORT REPORTS

WAKUI S, FURUSATO M, USHIGOME S, KANO Y. Coexpression of different cytokeratins, vimentin and desmin in the rete testis and epididymis in the dog 147

STEWART I J, MUKHTAR D D Y. A scanning electron microscopy study of interactions between mouse granulated metrial gland cells and placental trophoblast cells in vitro 153

DELANEY P M, KING R G, LAMBERT J R, HARRIS M R. Fibre optic confocal imaging (FOCI) for subsurface microscopy of the colon in vivo 157

KHALEDPOUR C, SCHINDELMEISER J. Atypical course of the rare accessory extensor carpi radialis muscle 161

TOMO S, TOH H, HIRAKAWA T, TOMO I, KOBAYASHI S. Case report: the cleidocervical muscle with speculation as to its origin 165

BHATNAGAR K P. Skeletal muscle in the pineal gland of the bat, *Rhinopoma microphyllum*: an ultrastructural investigation 171

BOOK REVIEWS 177

PROCEEDINGS OF THE ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND 181

ANNOUNCEMENTS 209

PART 2 APRIL 1994

REVIEW

FRACKOWIAK R S J, FRISTON K J. Functional neuroanatomy of the human brain: positron emission tomography – a new neuroanatomical technique 211

PAPERS

XU J, LING E-A. Studies of the ultrastructure and permeability of the blood–brain barrier in the developing corpus callosum in postnatal rat brain using electron dense tracers 227

ABERNETHY D A, THOMAS P K, RUD A, KING R H M. Mutual attraction between emigrant cells from transected denervated nerve 239

ZHANG Y L, TAN C K, WONG W C. The ciliary ganglion of the monkey: a light and electron microscope study 251

LI Z S, YOUNG H M, FURNESS J B. Nitric oxide synthase neurons of the gastrointestinal tract of an avian species, *Coturnix coturnix* 261

SÁNCHEZ-QUINTANA D, CLIMENT V, GARCIA-MARTINEZ V, ROJO M, HURLÉ J M. Spatial arrangement of the heart muscle fascicles and intramyocardial connective tissue in the Spanish fighting bull (*Bos taurus*) 273

XU J, LING E-A. Upregulation and induction of surface antigens with special reference to MHC class II expression in microglia in postnatal rat brain following intravenous or intraperitoneal injections of lipopolysaccharide 285

BRIGHT N A, OCKLEFORD C D, ANWAR M. Ontogeny and distribution of Fcγ receptors in the human placenta. Transport or immune surveillance? 297

ROBERTS P, MCGEACHIE J K. The enhancement of revascularisation of skeletal muscle transplants using the β_2-agonist isoprenaline 309

FABRICIUS C, BERTHOLD C-H, RYDMARK M. Dimensions of individual alpha and gamma motor fibres in the ventral funiculus of the cat spinal cord 319

SCHMOLKE C. The relationship between the temporomandibular joint capsule, articular disc and jaw muscles 335

ALI K Z, DICKSON G R. Influence of the fibula on growth of the rat tibia 347

CARUNCHO H J, DA SILVA P P. Alterations in the intermediate layer of goldfish meninges during adaptation to darkness 355

MCDONNELL D, REZA NOURI M, TODD M E. The mandibular lingual foramen: a consistent arterial foramen in the middle of the mandible 363

BROWN S C, STICKLAND N C. Muscle at birth in mice selected for large and small body size 371

CLAVENZANI P, SCAPOLO P A, CALLEGARI E, BARAZZONI A M, PETROSINO G, LUCCHI M L, BORTOLAMI R. Motoneuron organisation of the muscles of the spinal accessory complex of the sheep investigated with the fluorescent retrograde tracer technique 381

LITTLE G J, HEATH J W. Morphometric analysis of axons myelinated during adult life in the mouse superior cervical ganglion 387

YAMAMOTO Y, KITAMURA N, YAMADA J, ATOJI Y, SUZUKI Y, YAMASHITA T. Structure of the enteric nervous system in the sheep omasum as revealed by neurofilament protein-like immunoreactivity 399

KRAUSE W J, CULLINGFORD G L, FREEMAN R H, EBER S L, RICHARDSON K C, FOK K F, CURRIE M G, FORTE L R. Distribution of heat-stable enterotoxin/guanylin receptors in the intestinal tract of man and other mammals 407

SHORT REPORTS

MÜLLER T. Large nerve cells with long axons in the granular layer and white matter of the murine cerebellum 419

MANGURIAN L P, LEWIS R, WALSH R J. Placental lactogen binding sites in the pregnant rabbit choroid plexus 425

BOOK REVIEWS 429

BOOKS RECEIVED 433

PROCEEDINGS OF THE ANATOMICAL SOCIETY OF SOUTH AFRICA, 1993 435

ANNOUNCEMENTS 443

PART 3 JUNE 1994

SYMPOSIUM

SYMPOSIUM ON THE BIOLOGY OF JOINTS 445

ARCHER C W, MORRISON H, PITSILLIDES A. Cellular aspects of the development of diarthrodial joints and articular cartilage 447

BIRK D E, ZYCBAND E. Assembly of the tendon extracellular matrix during development 457

GARDNER D L. Problems and paradigms in joint pathology 465

LOHMANDER L S. Articular cartilage and osteoarthrosis. The role of molecular markers to monitor breakdown, repair and disease 477

EDWARDS J C W. The nature and origins of synovium: experimental approaches to the study of synoviocyte differentiation 493

RALPHS J R, BENJAMIN M. The joint capsule: structure, composition, ageing and disease 503

PAPERS

RUSKELL G L. Trigeminal innervation of the scleral spur in cynomolgus monkeys 511

WOODALL P F, SKINNER J D. Morphology of intestinal villi in African antelope (Artiodactyla: Bovidae) 519

STICKLAND N C, BATT R A L, CROOK A R, SUTTON C M. Inability of muscles in the obese mouse (*ob/ob*) to respond to changes in body weight and activity 527

MAYHEW T M, WADROP E, SIMPSON R A. Proliferative versus hypertrophic growth in tissue subcompartments of human placental villi during gestation 535

TAY S S W, MOULES E W, BURNSTOCK G. Colocalisation of NADPH-diaphorase with nitric oxide synthase and vasoactive intestinal polypeptide in newborn pancreatic neurons 545

DJERIDANE Y. The harderian gland and its excretory duct in the Wistar rat. A histological and ultrastructural study 553

BERNABEU A, MARTINEZ-GUIJARRO F J, LUIS DE LA IGLESIA J A, LOPEZ-GARCIA C. An axosomatic and axodendritic multipolar neuron in the lizard cerebral cortex 567

DIKRANIAN K, LOESCH A, BURNSTOCK G. Localisation of nitric oxide synthase and its colocalisation with vasoactive peptides in coronary and femoral arteries. An electron microscope study 583

TORRES A P, ALDACO D A M. Ia antigens are expressed on ATPase-positive dendritic cells in chicken epidermis 591

ZELLER U, KUHN H-J. Postpartum erythrophagocytosis, iron storage and iron secretion in the endometrium of the tree shrew (*Tupaia*) during pregnancy 597

KANG Y S, KO J S, HWANG S M. Structural aspects of the reversal phase of alveolar bone remodelling 607

DHEEN S T, TAY S S W, WONG W C. Ultrastructural changes in the hypothalamic supraoptic nucleus of the streptozotocin-induced diabetic rat 615

REVELL W J, BROOKES M. Haemodynamic changes in the rat femur and tibia following femoral vein ligation 625

SHORT REPORTS

AJANI M L. Anatomical variation in position of the greater palatine foramen in the adult human skull 635

DHARAP A. An unusually medial axillary arch muscle 639
ÇELIK H H, ŞENDEMIR E, ŞIMŞEK C. Anomalous insertion of abductor pollicus longus: case report 643

CORRESPONDENCE 647

BOOK REVIEWS 649

BOOKS RECEIVED 651

ANNOUNCEMENTS 653

INDEX 655